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## 3. Concentric Squares

Program Name: CSquares.java

Input File: csquares.dat

James is writing an application that involves a maze. He needs you to write a program that will draw as many concentric squares as possible around a given point, called the center, using the following method:

- The center of the maze will be a single cell and will contain a space.
- Around the center, there will be a square of cells that each contain an asterisk (\*)
- Around the first square of asterisks, there will be a square of spaces.
- The space squares and the asterisk squares will continue to alternate as long as there is room to the left of the center of the maze.

James will then use your squares to create his maze.

### Input

The first line of input will contain a single integer  $n$  that indicates the number of mazes you are to draw. Each of the next  $n$  lines will contain a positive even integer  $r$  ( $2 \leq r \leq 20$ ), where  $r$  is the row and column that contains the center of the maze.

**Note:** The coordinates of the upper left corner of the maze are 1 1.

### Output

For each line of input, you will print the maze as described above. Print at least one blank line after each maze.

### Example Input File

```
1
6
```

### Example Output to Screen

```
*****
*               *
*  * * * * *  *
* *           * *
* *  * * *  * *
* * * * *  * *
* * * * *  * *
* *  * * *  * *
* *           * *
*  * * * * *  *
*               *
*****
```

### Notes:

- The outside square will always begin in column one and will always contain asterisks.
- A blank line at the end of the output is optional.